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(71) Applicant (*for all designated States except US*):
POLIMERI EUROPA S.p.A. [IT/IT]; Via E. Fermi
4, I-72100 Brindisi (IT).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): DELLEDONNE,
Daniele [IT/IT]; Via Romana 56, I-28047 Oleggio-Novara
(IT). RIVETTI, Franco [IT/IT]; Via Oggio 28, I-20139
Milan (IT).

(74) Agents: DE GREGORI, Antonella et al.; Ing. Barzano'
& Zanardo Milano S.p.A., Via Borgonuovo, 10, I-20121
Milan (IT).

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(54) Title: PROCESS FOR THE PREPARATION OF 1-OCTENE

(57) Abstract: Process in two steps for the preparation of 1-octene starting from butadiene which comprises: a first step (a) in which the bis-hydrodimerization of butadiene to 1,7-octadiene is effected in the presence of a catalyst based on a palladium complex containing one or more tri-substituted monodentate phosphines, in an aprotic polar solvent optionally containing an organic base; a second step (b) in which the partial catalytic hydrogenation of 1,7-octadiene to 1-octene is effected, the above process being characterized in that: (i) in the first step the aprotic polar solvent is selected from disubstituted cyclic ureas; (ii) in the second step the catalyst is selected from non supported ruthenium complexes having general formula (I I): RuX_mL_n (I I).